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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,855	08/03/2000	Richard Rowe	IGTECH.0007P	9950

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WEIDE & MILLER, LTD.
7251 W. LAKE MEAD BLVD.
SUITE 530
LAS VEGAS, NV 89128

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT PAPER NUMBER

3622

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,855

Applicant(s)

ROWE, RICHARD

Examiner

Stephen M Gravini

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ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 8, 11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable

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subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete, and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). Together, the "technological arts" and "useful, concrete, and tangible result" judicial review standard, result in a comprehensive examination standard wherein the "technological arts" is one element and the "useful, concrete, and tangible result" is another complementary element.

This comprehensive examination standard was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an

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improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in

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State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. The Board of Patent Appeals and Interferences (BPAI) have recently acknowledged this dichotomy in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BPAI 2001).

Claims 14-16 are rejected under 35 U.S.C. 101 because the independently claimed invention does not recite a useful, concrete, and tangible result under *In re Alappat*, 31 USPQ2d 1545 (Fed. Cir. 1994) and *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 USPQ2d 1596 (Fed Cir. 1998) such that the claimed invention is within the technological arts under *In re Waldbaum* 173 USPQ 430 (CCPA 1972) wherein the phrase "technological arts" is synonymous with "useful arts" as it appears in Article I, Section 8 of the United States Constitution. In this claim, it is considered that a concrete and tangible result within the technological arts is not recited. Specifically, the recitation of crediting, retrieving, sorting, determining, storing, or scanning is considered not to produce a concrete result because a result cannot be assured or is not reproducible within the technological arts because those steps are not considered within the useful arts under the *Waldbaum* decision. Furthermore, under *In re Wamerdam*, 33 F.3d 1354; 31 USPQ2d 1754 (Fed. Cir. 1994), the crediting, retrieving, sorting, determining, storing, or scanning recitations are considered intangible because those steps are simply an abstract construct, such as a disembodied data structure and a method of making it, wherein those recitations involve more than a manipulation of an abstract idea and therefore is non-statutory under 35 USC 101. Because the independently claimed invention does not recite a useful, concrete, and

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tangible result, such that it is considered not within technological arts so that it uses technology in a non-trivial matter. Finally under *Ex parte Bowman*, 61 USPQ2d 1665 (Bd. Pat. App. & Inter. 2001) (unpublished but cited for analysis rather than precedent), in which an invention disclosed and claimed directed to a human merely making mental computations and manually plotting results on a paper chart is nothing more than an abstract idea which is not tied to any technological art and is not a useful art as contemplated by the United States Constitution. In this independently claimed invention, the steps of crediting, retrieving, sorting, determining, storing, or scanning are considered nothing more than an abstract idea since it is not tied to any technological art. However in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9-17, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Boushy (US 5,761,647). Boushy is considered to disclose a method and system comprising:

issuing at least one chase voucher having a particular cash value associated therewith or at least one data storage element for storing data regarding accepted cash

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vouchers, including a value of said accepted cash vouchers or crediting a value associated with an accepted cash voucher or bill money or at least one container for storing accepted bill monies and cash vouchers with one another (column 1 lines 23-27);

accepting by said at least one gaming machine said at least one cash voucher or a scanner for reading information associated with said cash vouchers or at least one apparatus adapted to scan said cash vouchers to obtain value and identification information regarding each cash voucher (column 5 lines 58-60);

crediting said particular cash value to a player of said at least one gaming machine (column 5 lines 60-64);

generating a record regarding said at least one accepted cash voucher (column 3 lines 13-16);

retrieving one or more cash vouchers from said at least one gaming machine (column 10 lines 40-64); and

comparing information from said one or more retrieved cash vouchers to information regarding said at least one accepted cash vouchers contained in said record or a computing device adapted to determine whether the value of said sorted and scanned cash vouchers is the same as the value of cash vouchers accepted to said container (column 5 lines 65-67). Boushy is considered to also disclose the claimed sorting mechanism arranged to sort bill monies and cash vouchers retrieved from said at least one gaming machine or at least one apparatus adapted to sort cash vouchers from said bill monies retrieved from said at least one container (column 6 lines 1-8),

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high speed scanner (column 7 lines 1-12), reject area with soft count and hand-held scanner (column 9 lines 26-53), storing cash vouchers and bill monies after crediting with scanning (column 9 lines 40-53),

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-8, 18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boushy in view of Luciano et al. (US 6,500,067). Boushy discloses the claimed invention as discussed above in the anticipatory rejection except for the step of accepting and crediting at a gaming machine including retrieving money and reading cash vouchers, bar code, unique identifying element, reconciling and sorting, and laser-beam scanner. Luciano is considered to disclose the step of accepting and

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crediting at a gaming machine including retrieving money and reading cash vouchers unique identifying element, and reconciling and sorting (column 5 lines 23-43).

Furthermore it would have been a matter of design choice to use bar codes and laser beam scanners to perform the transactions as claimed by the applicant. It would have been obvious to those skilled in the art to combine the teachings of Boushy with the design choice features and teachings of Luciano to allow accountable actions between cash vouchers and bill monies such that monies and credits can be transferred without a loss of value while employing modern data and information reading, such as those used by bar code and laser beam scanners.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boushy in view of Holch et al. (US 5,800,269). Boushy discloses the claimed invention as discussed above in the anticipatory rejection except for the claimed single apparatus to sort and scan. Holch is considered to the claimed single apparatus to sort and scan (column 4 lines 15-25). It would have been obvious to those skilled in the art to combine the teachings of Boushy with the teachings of Holch to allow accountable actions between cash vouchers and bill monies such that monies and credits can be transferred without a loss of.

Response to Arguments

Applicant's arguments filed December 22, 2003 have been fully considered but they are not persuasive. The non-statutory subject matter rejection has been further

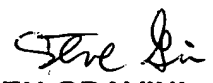
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clarified in view of recent examiner training on that type of rejection. The anticipatory and obviousness rejections have also been further clarified in order to allow applicant a clearer understanding of how the prior art is interpreted in light of recent Office policy emphasizing claim interpretation and MPEP 2111. As a result the rejection is made non-final in this action and is intended to answer applicant's remarks in response to the prior Office action.

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steve Gravini whose telephone number is (703) 308-7570 and electronic transmission / e-mail address is either steve.gravini@uspto.gov or stephen.gravini@uspto.gov. Examiner can normally be contacted Monday through Friday from 6:00 a.m. to 3:30 p.m. **If applicants choose to send information by e-mail, please be aware that confidentiality of the electronically transmitted message cannot be assured.** Please see MPEP 502.02. Information may be sent to the Office by facsimile transmission. The Official Fax Numbers for TC-3600 are:

After-final	(703) 872-9327
Official	(703) 872-9306
Non-Official/Draft	(703) 872-9325


STEPHEN GRAVINI
PRIMARY EXAMINER

smg
April 2, 2004